

# Bobtails show it's okay to avoid relatives

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bobtails are natural loners and appear to go particularly out of their way to avoid their family. Credit: Stephanie Godfrey

If you've ever tried to avoid a family Christmas lunch, you can take heart in the knowledge that bobtails, too, like to avoid the relatives.

Murdoch University ecologist Stephanie Godfrey and her team have found bobtails (*Tiliqua rugosa*) actively avoid their family members, behaviour that could reduce inbreeding and fights between related

lizards.

They made the discovery by attaching GPS trackers similar to fitness watches to 60 bobtails in South Australia.

They used DNA testing to determine which individuals were related and tracked how often the lizards interacted with each other.

Bobtails are natural loners, coming across each other much less than would be expected by chance, Dr Godfrey says.

But they appear to go particularly out of their way to avoid their family, running into their relatives even less than unrelated individuals.

"Among males and females, as you might expect, they spent less time together if they were more related to each other, which is a mechanism to avoid inbreeding," Dr Godfrey says.

"Then among males, and this is probably the finding we were probably more surprised about...we found that individuals that were unrelated to each other tended to spend more time together."

Interactions between male bobtails are mainly based around fighting, and this might help to explain why the lizards avoid their relatives.

"They have quite spectacular fights, they'll grapple onto each other and try to flip each other over—it's quite a costly exercise if you're a male lizard because it can lead to debilitating injuries," Dr Godfrey says.

"In most systems we're used to thinking about the benefits of your kin, so normally you'll socialise and help your kin.

"In this system we think there might actually be benefits to avoiding your

kin if it's just going to end in a fight."

Previous research has shown bobtails have a highly developed sense of smell and this could be how the lizards identify those related to them.

Lizard love

Although bobtails appear to go out of their way to avoid their families, they are unique in that they form long-term monogamous relationships.

"The same pairs will tend to reunite in consecutive years, and there was even, I think, one pair recorded that's been found in consecutive years for over 20 years," Dr Godfrey says.

"It's really quite a remarkable system and really unusual in [lizards](#), and even in other species."

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